



# Crewing

In recent editions of Fireball News we have tried to pass on the experience from top sailors within the fleet. Having covered helming upwind and downwind, it is now the turn of the crews. After the application of copious amounts of beer our roving reporter has been able to glean some top tips from the most experienced crews in the country on their tricks of the trade. While some of these may seem obvious, there maybe something of interest in here to help improve your boathandling;

1. The jib on a Fireball is very tall and narrow. This means that easing the jib sheet a fraction, has a large effect on the twist of the head of the sail. Therefore, on the beat jib sheet position to the nearest millimetre is critical to good performance. To ensure that the position of the jib sheet can be accurately gauged, mark the sheet with indelible marker or whipping twine, so that when the sheet is in its close-hauled position, the mark is either next to the barber hauler block or the cleat depending on personal preference. When you think you have found a fast setting, remember the position of the mark relative to the block/cleat, and when you tack or are out in similar conditions you can repeat the setting.
2. When sailing upwind in windy conditions, ease the jib slightly as gusts hit you. This opens up the slot and allows you to accelerate with the gust. Failure to do this will push the bow in, and cause you to stall or even capsize. In particularly windy weather, look for gusts approaching on the water (darker patches), and have the sheet uncleated in preparation for when the gust hits. Once a gust has passed, pull the jib back into its normal position (as indicated by your marker).
3. Never assume that your helm has seen something especially other boats. He will be trying to make the boat go fast (you hope), and therefore will not have much time for looking around.
4. Plan ahead at the start of a race. Decide which will be the first kiteable leg of the race, and then make sure that the spinnaker is packed so that for the first hoist it will be hoisted from the bag on the leeward side, and that the pole will be on the windward side of the boom. For a normal olympic course leaving marks to port the kite will be in the port bag and the pole on the starboard side of the boom. By forward planning you will ensure a good hoist (hopefully).
5. Coming into the windward mark, the helm should pull the twinning line on a few boatlengths from the mark To do this he should reach forward take a turn of the sheet around his hand and pull the spinnaker along the foredeck 6". This will then enable him to pull the twinning line fully on and cleat it and leave one less thing for the crew to do during the hoist. There are nearly always places to make at the windward mark if you can outhoist someone.



6. When doing a chuck hoist because the kite is the windward bag, make sure the windward twinning line is on, and the windward sheet uncleated. Pull the sheet all the way through until the stopper knot is against the twinning line block. This will ensure that the running of the sheet through blocks will not impede your throw around the forestay. There is no surer way to get some verbal from your helm because the spinnaker blows between the mast and the jib since you were standing on the sheet. If you do happen to achieve this, quickly fix the pole on the mast. This will project part of the spinnaker forward of the forestay, and the combination of this and you pulling on the leeward sheet should get the sail round.
7. Ever pushed the pole out, clipped it on the mast only to find the sheet has fallen out the end? By replacing the centre 6" of the line joining the triggers at each end of the pole with thin shockcord there is less likelihood of catching the line and opening the triggers accidentally.
8. If when dropping the spinnaker the sheet flicks over the end of the boom, this is a sign that the twinning lines are probably too long. The twinning line should be long enough so that it does not pull the sheet down on a broad reach and no longer. In addition, as the crew goes forward to drop the kite he should give the sheet to his helmsman so that a little tension is kept on it.
9. If the crew has problems staying on the side of the boat in windy and wavy weather, especially downwind, a good application of surfers wax on the side decks increases the grip. Wax on the side of the centreboard case top also aids your grip when pushing out. Strawberry flavoured wax is especially recommended.
10. Style should never come before function. It's no good trapezing with both feet together, and hands behind your head if you happen to be flying around the forestay at the time. If you feel a bit unsteady, move your feet apart and trapeze slightly higher. If you feel yourself moving, the neck of your helm's lifejacket makes a convenient steadying handle.
11. All crews acknowledge that it is not good preparation to have 20 pints of lager and a chicken madras the night before an important race, which is why they all have 25 pints of lager and a chicken vindaloo.
12. The ultimate rule of crewing is that in the heat of the moment when things aren't quite going to plan "The helmsman is always right". Although it is generally acknowledged that they are always wrong, when voices are raised nothing is gained by answering back. Those who sail with their spouse should especially heed this advice since ignoring this rule could end in divorce.



Rather stupidly Mr. Townend has asked me to put pen to paper and write an article on how to crew a Fireball to an International Standard. I am still not quite sure if this request was made:

1. to call my bluff
2. get some free advice without having to get me pissed;
3. or, and most likely, taking the piss.

As many of you will know I have never been frightened of making a fool of myself so here goes.

### **The Start**

It is absolutely critical that both you and your helmsman are in the right frame of mind at the start of a race. How you achieve this will obviously depend upon the individuals concerned. In my experience I feel that the only way to do this is to get out onto the race course early and do a practice beat, no matter what the weather or hangover. Whilst sailing the beat you, as a crew, should take the opportunity to discuss with your helmsman the following areas:

- The rig settings, foil settings, weight jacket or not.
- The wind - compass bearings should be taken and a view should be formed as to what is generally happening with the wind.
- Discuss the weather forecast and how this will affect your race.
- Tide - high and low water should have been written down and you should discuss the effect it will have on the race.
- Start sailing as a team, get relaxed in the boat to the conditions.
- Start to formulate a general race plan.
- Discuss your hangovers and how you nearly got lucky the night before.

Many helmsmen are reluctant to get out early and go through this ritual. It is your job as crew to force him to do it. It is imperative that you do not come off the start line blind to the beat and sluggish in the boat, even dart players throw a few arrows before the start of a game. Having gone upwind you will have a chance to hoist the kite, practice a few gybes and get the feel of the waves for the off wind legs. It is also advisable to quickly hoist the kite just before the 5 minute gun to make sure there aren't a few gallons of water trapped in it, especially if it is windy or there are large waves. Remember to keep an eye on your watch, you don't want to miss the start. The next part of the race preparation is working out your tactics for the start it is your job as crew to control and direct your helmsman at the start. Try to imagine that you are helming and pass all your thoughts to your



helmsman as two brains are better than one (in most cases!) Below I have listed areas that must be discussed if a good start is to be made:

- Line bias. Don't forget this is constantly changing and should be checked up to 30 seconds before the start
- Tidal influence.
- Which tack will take you closest to the windward mark.
- Get a transit on the line.

By the time the 10 minute gun has gone you should have formulated a plan with the above information. Try to get your helmsman to be conservative, many lines will be very biased to port or starboard ends. If this is the case, do not let your helmsman start tight at one end or the other. 20 or 30 boats will all want to be there and as a consequence only two or three will get a clean start. Start towards the favoured end but find clear wind.

OK, with about 1 minute 30 seconds, we are in our desired area of the line. As crew you should be watching boats and the flags on the committee boat to see if the wind is shifting. Call to your helmsman the position of other boats and distance from the line. Look for that gap. With about 30 seconds to go you should be two to three boat lengths from the line (470 crews two to three boat lengths over the line).

At this point, take a look over your shoulder. In many cases you might be able to quickly tack up to windward and create a greater gap to leeward. 10 seconds to go, watch other helms to see them go for the mainsheet and feed this information to your helmsman. Call if you are covered, i.e. that nice race officer man cannot see your number and then go. Quickly assess your situation once off the line. If you have someone fast underneath you, crack off to roll them as in a further 50 yards they might force you to tack. Call the compass to see if you are on the right tack and look for that all important tack onto port to clear the fleet into clear air.

### **The First Beat**

So, you are off the line. Get your mind back to your plan, don't let your helmsman get involved in a drag race, taking you out to some god-forsaken corner of the course never to be seen again. Whilst on the beat you should be feeding the following information to your helmsman:

- Compass bearings.
- Gusts and whether they will lift or head.
- Position of other boats.
- Position of windward mark.

When passing these remarks onto your helmsman be consistent in tone as well as manner of information. Nothing is worse than a helmsman hearing "So and so is going faster than us, must be those new sails". "O God, he's going straight over the top, he has got a twenty degree lift." It might sound better if you said "Boats on top getting lifted, we should consider getting across, number XXX



going quickly, only one in the group with more speed." This is making negative news sound positive and will hopefully have the effect of keeping speed and concentration high in your boat. Never let your helmsman near a lay line. This is similar to playing Russian Roulette except in lay line hitting the gun has five bullets in six chambers instead of one. Once on the layline there is no return - a championship winner does not hit lay lines.

### The Windward Mark



As I have already said, the start of the race is extremely important as there are so many possibilities to give yourself an advantage or disadvantage over competitors. This is also true for that first windward mark rounding. Rounding the windward mark is all about good teamwork and being conservative. So many crews and helmsmen forget about the compass going into the mark and just start tacking to clear wind (not the right thing to do). Like so many sports, the ability to see a situation happening 30 seconds before it happens is a must, as you can get yourself out of the area before it gets messy. It is your job as crew to watch that compass and find your helmsman a way through the pack of boats. Again watch that lay line, never get too high of the mark, all that happens is you open the door for boats coming in on port to tack underneath you.

How to get round a windward mark is a difficult subject and probably deserves an article on its own. Below I have noted a few points to be considered 100 yards from the mark;



- What tack is lifting into the mark?
- Where are most of the fleet placed?
- If we approach on port, will we find a gap?
- Are boats high on the starboard lay line, can we tack underneath them?
- What tidal effect will we have going around the mark?
- If we approach on port, will we have dirty wind from the boats going down the first reach?
- Where is the gybe mark high or low?

If you consider these points 100 yards from the mark you are probably going to take quite a few boats. OK, you have gone round the mark and you are ready for the kite hoist. Remember a good kite hoist can gain a lot of places, a bad one will not only lose places but could lose your rhythm for both reaches. Make sure you are set up for the hoist. If you have approached the mark on starboard, the helmsman should have got the pole ready, with you helming, so all you have to do is come in and put the pole onto the mast. It is this sort of manoeuvre that wins races. If the pole isn't ready, the least your helm can do is preset the twinning line.

### **Technique Down the Reach**

My view is that at this point responsibilities shift in the boat. Up the beat the crew is the tactician and the helmsman the boat speed merchant. On the reach the role reversed. Unfortunately practice together in the boat is the only way to achieve good boat speed on a reach. What, as a crew, should you be doing to promote speed? Reaction to gusts is an important, whether the wind is light or heavy. While trimming the kite the crew should also watch the colour of the water above and in front of the boat to detect gusts early. Trimming the boat is also critical. Use your body weight by walking up and down the gunwale either to keep the transom out of the water or to stop nose-diving. Remember you are allowed to pump to promote planning. Do not cheat but make sure you use what pumps you have effectively. React to the gusts before they hit. Get ready to ease the sheet, curl the luff if need be and adjust yourself on the wire. Get as low as you possibly can for these gusts, your helmsman will be able to maintain height and speed, leaving competition standing. By pre-empting the gusts you will drive forward when they hit you, and not Stall out on your ear.

### **The Gybe Mark**

Coming into the gybe mark the crew should start to give the helm a running commentary on what is going on in the fleet, who you will have water on, who will have water on you, whether you will have to slow your boat down to make a good rounding. Look for the leeward mark, do not go into the mark without knowing whether you need to go high or low on the next reach. Are there any cowboys around who should be avoided at all costs (John Merricks and Vyv Townend). The crew should unclip from the wire in the last few seconds before the gybe (do remember to hold onto the handle) and thus save a few seconds unclipping, come into the boat, leeward twinner on, pull kite round, old twinner off, trip pole, out on wire and go. Let the helmsman sort out the jib. Once the boat is going, find that leeward mark.

### **The Leeward Mark**

Again start calling the situation 100 yards from the mark. If boats have already gone round (you have not being cheating enough) see what tack is lifted and tell your helmsman. Many crews feel that once the kite is in the bag their job is over, not the case. It is your job to ensure that you get a good rounding and you get on the right tack with clear wind as quickly as possible. This comes with practice, teamwork and some good compass work. Try to have the boat set up for the beat before rounding the mark and having your helmsman head stuck in the bottom of the boat is

slow. On the second beat you should have learnt from your mistakes from the first and build on your knowledge. Don't just forget the previous beat. If you find yourself mid fleet, do not bang a corner. This is unforgivable, you have only done one quarter of the race, sail up the middle and pick off boats.

### **Second Windward Mark**

Try to decide 100 yards from the mark which way you want to go on the run. If you are getting lifted on starboard tack you will want to be on the port gybe and vice versa if you are getting headed on starboard. Remember that there are as many wind shifts off wind as there are up wind (funny that) so look out for them and don't be frightened to gybe on a shift. If your crew work is good you should not lose any distance on a gybe. As crew you should be setting the course your helmsman is to steer down wind by telling him to go lower if you have good pressure in the kite or to go up if you do not have good pressure. When you get your teamwork together this is very fast. The rest of the race is simple, keep your concentration high, do not take any risks and keep motivation high. One area that must be worth the final few lines (thank God) is the finish.

### **The Finish**

The finish always heightens tension in the boat. Do not let this happen in your boat, keep relaxed. If you are being too aggressive you will miss what is happening around you. Do not get to one side of the beat if you are in a bunch of boats. It is better to keep tenth than go for a ninth but run the risk of dropping to fifteenth. Watch the flags on the committee boat to see what tack is lifting. Tell your helmsman which end of the line is closest, with this information you should have no last minute horrors. You are probably all thinking that you have read all of the above and more before so nothing new here. The important point is to remind yourself of what is required as we all forget. How many races as a crew can you say that you have done an of the above, I cannot think of one race where I haven't forgotten something. Happy crewing



### *Fireball Crewing tips by Ruedi Moser*

Crewing is often believed to be easy compared to helming. **Not true!** If you want to be a perfect crew, especially in a trapeze boat such as the Fireball, you have to get out and train.

But all the training in the world is of little use when you are hindered by poor equipment. The most important item for a Fireball crew is a comfortable trapeze harness. This should support the back, not put stress on it which a badly designed one will do. You have to make sure it's the right size; make sure you don't choose one which is too big. In the shops you will often find only the larger sizes to suit the fatter non-Fireball sailor. All straps should be adjustable, and the hook should be about navel height. Your body will then be balanced when on the wire. The most comfortable sort is one where the hook bar extends as far as the hip bone and relieves the pressure on the pelvis. Make sure that there isn't too much padding (especially cotton wool type).



Although this looks very comfortable, it can take in a lot of water and become excessively heavy. Foam is very efficient, although at first it can be a bit stiff, but this quickly improves with use. It is essential to try it out by hanging from something. Before you buy it's also worth considering if you are going to wear your lifejacket under or over the harness. Many people put the lifejacket under the harness for additional padding. But I had a problem with the shoulder straps slipping, so I prefer to wear the lifejacket on top. This means the lifejacket has to be short enough not to get in the way of the trapeze hook, and one with straps is preferable to one with a zip.

An important detail is the pulley system used to adjust the trapeze wire. To hold the rope, I use a Clamcleat CL230 which is very reliable, without ever getting my finger trapped in it. When pulled right upwards, my backside is just about a hand's width above the deck. This gives me ease of movement in light winds, making it easy to swing in and out. In the lowest position, the hook is about a hand's width below the edge of the deck. I have the trapeze handle right above the pulley system.

### Sailing Advice

- ☑ When going out on the wire, always push out with the front leg first, or you can easily fall forwards. The centreboard case makes an ideal springboard.
- ☑ Adjust your height so you can get out as far as possible. You should practise adjusting your height while still stretched out; it is actually possible to do this without having to get hold of the trapeze handle.
- ☑ When fully out on the wire, your front leg should be fully stretched (including your foot), and the back leg slightly relaxed.
- ☑ When you feel secure on the trapeze, move your feet as close together as possible. If you can, stand on your tip-toes. This acts as a shock absorber and you will find it easier to balance.
- ☑ When you are on the wire your body will be affected by a changing set of forces. You need to understand what these are and how to react to them. Practise swinging in and out quickly, without shaking or banging the boat. Move back and forward along the boat without losing your balance. Then try to co-ordinate your movement with the waves. The more relaxed you are, the better your reactions will be and you'll get tired far less easily.
- ☑ Your aim should be to keep the boat completely upright. So you should stay stretched out until the hull is completely flat. (The side of the hull will disturb the water).
- ☑ An important point is the co-ordination between crew and helm. One common problem is when they both over-react, both leaning in or out too far or working against each other. Only through sailing together as much as possible can you get used to each other and learn to trust each other.
- ☑ Concentrate your weight in the middle of the boat. When it's windier, you may both feel more secure if you can lean against each other.

**By Ruedi Moser, has won the European Championships four times crewing for his brother Eric, and was crowned World Champion in 2006.**